AMENDMENTS TO THE DRAWINGS

Two (2) sheets of replacement drawings in compliance with 37 C.F.R. § 1.84 are submitted herewith. The submitted drawings are formal drawings intended to replace the drawings previously submitted on January 7, 2004. In particular, Figure 3 has been designated as "Prior Art," and a legend in English is provided for Figure 20. No new matter is added. The Examiner is respectfully requested to acknowledge receipt of this drawing.

Attachment: 2 Replacement Sheet(s)

REMARKS

Claims 1-17 are all the claims pending in the application. Claims 1, 3-5, 7, and 12 have been amended solely for the purpose of improved readability. Since such amendments are made to correct minor, basic elements, Applicants submit that that they do not narrow the scope of the claim and do not raise any Festo implications. Applicant also adds claims 15-17, which are clearly supported throughout the Specification.

I. Drawings

The Examiner objects to Figure 3 for failing to contain the label "Prior Art." Applicants respectfully enclose a Replacement Sheet indicating this change to Figure 3.

The Examiner objects to Figure 20 because the drawing elements in this figure needed descriptive legends. Applicants respectfully enclose a Replacement Sheet including the requested legend.

II. Claim Objections

The Examiner objected to claims 1, 3-5, 7-8, and 12 for containing a number of informalities. Applicants have corrected the informalities as suggested by the Examiner as set forth in this Amendment except for claim 3. The Examiner states that "a static" as recited in claim 3 should be replaced with "the static." Applicants respectfully disagree. The amendment as proposed by the Examiner would form improper antecedent basis. Claim 3 recites "a static status," for the first time at line 30 of claim 3, thus requiring no amendment to preserve proper antecedent basis.

Accordingly, Applicants respectfully request the Examiner to withdraw the objections to claims 1, 3-5, 7-8, and 12.

III. Claim Rejections under 35 U.S.C. § 112

Claims 3-5, 10-11, and 13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have amended claims 3-5 to overcome the 35 U.S.C. § 112 rejection. Due to their dependency on claims 3 and 4, claims 10-11 and 13 should also be allowable.

Accordingly, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. § 112 rejection of claims 3-5, 10-11, and 13.

IV. Claim Rejections under 35 U.S.C. § 103

Claims 1-2, 6-9, 12 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Motley (U.S. Patent No. 6,721,282) in view of Ferenc et al. (U.S. Patent No. 4,962,497) and further in view of LoGalbo et al. (U.S. Publication No. 2002/0093928). Claims 4 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Motley in view of Saidi (U.S. Patent No. 7,106,738) and further in view of Terho et al. (U.S. Patent No. 6,507,590). In addition, claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Motley in view of Ferenc and further in view of Saidi. Applicants respectfully traverse these grounds of rejection.

Claim 1

Independent claim 1 recites, *inter alia*:

> ". . . wherein the formatting means determines whether size of a
> section of the IP datagrams is too large for insertion in the time
> slots **based on the predicted available bandwidth.**"

The Examiner acknowledges that Motley in view of Ferenc does not disclose or suggest

"wherein the formatting means determines whether size of a section of the IP datagrams is too

large for insertion in the time slots based on the predicted available bandwidth" as recited in

claim 1. *See* page 7 of Office Action dated July 28, 2008 Specifically, the Examiner alleges that

page 5, paragraph 0050 of LoGalbo discloses this portion of claim 1. *See* page 7 of Office Action

dated July 28, 2008. Applicants respectfully disagree.

LoGalbo is concerned with the slot format for a communications system. LoGalbo

teaches that a TDMA slot is comprised of three parts, a slot header 205 and two data blocks 210

for transmitting data. *See* LoGalbo, pg. 5, p0045. LoGalbo further teaches that the format of the

downlink link layer headers are such that one of the link layer headers 310 corresponds to one of

the data blocks 210. *See* LoGalbo, pg. 5, p0049. The function of the downlink link layer header

is to identify the portion of the IP packet that is being carried by a particular data block 210. *See*

LoGalbo, pg. 5, p0049. <u>The IP packets are then split if it is determined that they are too large for</u>

<u>a particular a data block of a TDMA slot so that those split IP packets can be carried in multiple</u>

<u>data blocks 210.</u> *See* LoGalbo, pg. 6, p0050. As LoGalbo states:

> "When the IP packets are **too big to be carried in one of**
> **the data blocks 210** of the TDMA slot, the IP packets are split
> into segments and **are carried within multiple data blocks 210**
> **that may span many TDMA slots.**" LoGalbo, pg. 5, p0050

Based on this disclosure, LoGalbo must make a determination of whether an IP packet is

too large for a <u>data block of a TDMA slot</u>. That is, a data block is only a portion of a TDMA

slot, which is of a fixed size. *See* LoGalbo, pg. 4, p0042, pg. 5, p0045. As LoGalbo states:

> ". . . the **TDMA** time slots are of fixed size. Hence, the **IP** packets may have to be split into multiple **TDMA** slots." LoGalbo, p. 4, p0042

Therefore, the data blocks of LoGalbo are restricted by the size of the TDMA slot, which is fixed. That is, LoGalbo discloses that placing an IP packet into a data block is determine by the fixed size of the TDMA slot, which holds the data block, and not based on the available bandwidth. In other words, LoGalbo only discloses determining if data fits into a container of a predetermined size. LoGalbo does not disclose or suggest determining if data fits into the container that is partially full, where the fullness varies from container to container. In short, LoGalbo does not disclose determining available bandwidth. As a result, LoGalbo neither teaches nor suggests "wherein the formatting means determines whether size of a section of the IP datagrams is too large for insertion in the time slots based on the predicted available bandwidth" as recited in claim 1.

Even if Motely, Ferenc, and LoGalbo were combined, there would still be no teaching of "inserting at least one section of the IP datagram in the time slots corresponding to the available bandwidth" as recited in claim 1. Instead there would be a teaching of insertion of an IP datagram into data blocks contained in a TDMA slot of a fixed size, which is based on whether an IP packet is split because it was too large for the data block.

Accordingly, Applicants submit that claim 1 is patentable over the cited prior art for at least the foregoing reasons.

Claims 2 and 8-9

Since claims 2 and 8-9 are dependent upon claim 1, Applicants submit that these claims are patentable over the cited reference at least by virtue of their dependency on claim 1.

Claims 6

Independent claim 6 recites:

> ". . . wherein said formatting means determines transmission size of IP datagram sections **based on negative acknowledgement from said prediction means** when the section to be sent is too large."

The Examiner acknowledges that Motley in view of Ferenc does not disclose "wherein said formatting means determines transmission size of IP datagram sections based on negative acknowledgement from said prediction means when the section to be sent is too large" as recited in claim 6. *See* pages 8-9 of Office Action dated July 28, 2008. To cure this deficiency, the Examiner alleges that page 5, paragraph 0050, lines 4-10 and paragraph 52, lines 6-15 of LoGalbo discloses this portion of claim 6. *See* pages 8-9 of Office Action dated July 28, 2008. Applicants respectfully disagree.

As previously stated, page 5, paragraph 0050 of LoGalbo teaches that when IP packets are too large for a particular datablock of a TDMA time slot of a fixed size, they are split and carried within multiple data blocks. *See* LoGalbo, pg. 6, p0050. Claim 7 of LoGalbo states, "wherein the step of determining an acknowledgement requirement is accomplished <u>by the sending device</u>." *See* LoGalbo, pg. 10. In order to interpret claim 7 of LoGalbo, it is necessary to note the language of claim 1 of LoGalbo from which claim 7 depends. Claim 1 of LoGalbo states "determining an acknowledgement requirement <u>corresponding to the type of service</u>." *See* LoGalbo, pg. 9. LoGalbo further defines the acknowledgement as corresponding to the type of service of the IP packet which is being transmitted. *See* LoGalbo, pg. 2, p0025. The service type determines the priority and levels of error correcting convolutional codes. That is, the acknowledgement requirement concerns the type of service for an IP packet, and not the required

transmission size for the IP packet. *See* LoGalbo, pg. 9, p0071. Therefore, Claims 1 and 7 of

LoGalbo teach that an acknowledge requirement for a type of service is determined by the

sending device. Therefore, LoGalbo neither teaches nor suggests "wherein said formatting

means determine transmission size of IP datagram sections <u>based on negative acknowledge from</u>

<u>said prediction means</u>" where the prediction means is "<u>for predicting available bandwidth</u>" as

recited in claim 6.

Accordingly, Applicants submit that claim 6 is patentable over the cited prior art for at

least the foregoing reasons.

Claim 7

Since claim 7 is dependent upon claim 6, Applicants submit that claim 7 is patentable

over the cited reference at least by virtue of its dependency on claim 6.

Claims 4 and 13

Claims 4 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over

Motley in view of Saidi, further in view of Terho et al. Applicants respectfully traverse this

ground for rejection.

Claim 4 recites, *inter alia*:

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". . .deformatting means for extracting the IP datagram
sections from a frame comprising data from a mobile
telecommunication network and the at least one IP datagrams
section and concatenating the IP datagram sections in order to
direct the IP datagram sections to an Ethernet network. . . "
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The Examiner conceded that Motely in view of Saidi does not disclose "deformatting

means for extracting the IP datagram sections from a frame comprising data from a mobile

telecommunication network and the at least one IP datagrams section and concatenating the IP

datagram sections in order to direct the IP datagram sections to an Ethernet network" as recited in claim 4. *See* page 10 of Office Action dated July 28, 2008. The Examiner alleges that Saidi cures this deficiency of Motely, particularly figure 12 and column 14, lines 30-36 of Saidi, which disclose a packet deformatter. *See* page 10 of Office Action dated July 28, 2008.

Saidi teaches that a packet deformatter 130 of a switch contains a packet restorer 176, which receives train packets and extracts individual data packets from the train packets to restore data packets. *See* Saidi, col. 14, lns. 28-37. Once each packet is restored, that <u>data packet is ejected from the packet deformatter 130 into the switch</u>. *See* Saidi, col. 14, lns. 43-44, figs. 5, 6, and 12. That is, Saidi teaches that within a switch, a packet deformatter restores <u>data packets which are released from the packet deformatter back to the switch</u>. Therefore, Saidi does not teach or suggest "concatenating the IP datagram sections in order to direct the IP datagram sections to <u>an Ethernet network</u>" as recited in claim 4.

The Examiner further concedes that Motley in view of Saidi does not disclose "a frame comprising data from a mobile telecommunication network and the at least one IP datagrams" as recited in claim 4. To cure this deficiency, the Examiner cites Terho. However, Terho does not cure the deficiencies of Motley and Saidi.

Accordingly, Applicants respectfully submit that claim 4 is patentable over the prior art at least for the foregoing reasons. Since claim 13 is dependent upon claim 4, Applicants submit that claim 13 is patentable over the cited reference at least by virtue of its dependency on claim 4.

Claim 5

Independent claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Motley in view of Ferenc further in view of Saidi. To the extent that claim 5 recites similar subject matter to claim 4, claim 5 is patentable at least for the analogous reasons stated above with respect to claim 4.

V. Allowable Subject Matter

The Examiner has indicated that claims 3 and 10-11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office Action. Applicants respectfully submit that claims 3 and 10-11 have been rewritten to overcome any 35 U.S.C. § 112 rejections. Accordingly, Applicants submit that claims 3 and 10-11 should be deemed allowable.

VI. New Claims

In order to provide more varied protection, Applicant adds new claims 15-17, which are patentable by virtue of their dependency and for additional features set forth therein.

VII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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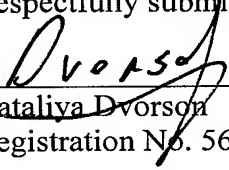
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